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| Notice of Allowability | Applicati n No. | Applicant(s) | |
| | 09/767,567 | BLOMQUIST, HAROLD R. | |
| | Examin r | Art Unit | |
| | John R. Hardee | 1751 | |

-- **The MAILING DATE of this communication app ars on the cover sheet with the correspondenc address--**
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to the attached examiner's amendment.
2. ☒ The allowed claim(s) is/are 1-4,6,11,12 and 15-21.
3. ☒ The drawings filed on 23 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachm nt(s)

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|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Richard Sutkus on January 17, 2005.

The application has been amended as follows:

Claim 1 (Currently amended) A process for preparing a free-flowing, phase-stabilized ammonium nitrate, said process comprising the following steps:

preparing a solution of ammonium nitrate, a surfactant, an inert liquid, and an ammonium nitrate phase stabilizer, said ammonium nitrate, said surfactant, and said phase stabilizer being soluble in said inert liquid, the amount of surfactant in said solution being about 0.01% to about 0.15% based on the combined weight of the ammonium nitrate and the surfactant;

atomizing the solution to form a stream of droplets, the droplets having an average diameter of about 50 μm to about 100 μm ;

freezing said stream of droplets by contacting said stream of droplets with an outer surface of a drum, said surface being maintained at temperature below the freezing point of said solution by passing a cooling medium through the interior of the drum;

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sublimating the frozen droplets to remove the inert liquid from the frozen droplets and form agglomerates of the phase stabilized ammonium nitrate; and

~~freeze-drying the droplets to form agglomerates of crystals of phase stabilized ammonium nitrate, the crystals of phase stabilized ammonium nitrate in the agglomerates being coated with a film comprising the surfactant; and~~

disintegrating the agglomerates into separated free-flowing phase stabilized ammonium nitrate crystals coated with a film comprising a surfactant.

Claim 5 is cancelled.

Claim 7 is cancelled.

Claim 8 is cancelled.

Claim 9 is cancelled.

Claim 10 is cancelled.

Claim 11 (Currently Amended) A process for preparing phase-stabilized ammonium nitrate comprising the steps of:

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preparing an aqueous solution of ammonium nitrate, a surfactant, and potassium nitrate, the amount of surfactant in said solution being about 0.01% to about 0.15% based on the combined weight of the ammonium nitrate and the surfactant;

atomizing the aqueous solution to form a stream of droplets, the droplets having an average diameter of about 50 μm to about 100 μm ;

freezing said stream of droplets by contacting said stream of droplets with an outer surface of a drum, said surface being maintained at temperature below the freezing point of said solution by passing a cooling medium through the interior of the drum;

~~cooling the stream of droplets to a temperature below the freezing point of the solution;~~

sublimating the frozen droplets to remove the water from the frozen droplets to form agglomerates of crystals of phase stabilized ammonium nitrate, said crystals of phase stabilized ammonium nitrate in the agglomerates being coated with a film of surfactant; and

disintegrating the agglomerates into separated free-flowing phase stabilized ammonium nitrate crystals coated with a film comprising the surfactant.

Claim 13 is cancelled.

Claim 14 is cancelled.

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Claim 21 (New) A process for preparing a free-flowing, phase-stabilized ammonium nitrate, said process comprising the following steps:

preparing a solution of ammonium nitrate, polyvinyl pyrrolidone, an inert liquid, and an ammonium nitrate phase stabilizer, the ammonium nitrate, the polyvinyl pyrrolidone, and the phase stabilizer being soluble in the inert liquid;

atomizing the solution to form a stream of droplets;

freeze-drying the droplets to form agglomerates of crystals of phase stabilized ammonium nitrate, the crystals of phase stabilized ammonium nitrate in the agglomerates being coated with a film comprising the polyvinyl pyrrolidone; and

disintegrating the agglomerates into separated free-flowing phase stabilized ammonium nitrate crystals coated with a film comprising the polyvinyl pyrrolidone.

Allowable Subject Matter

2. Claims 1-4, 6, 11, 12 and 15-21 are allowed.

3. The following is an examiner's statement of reasons for allowance: The claims as presently amended contain subject matter which was previously indicated allowable by Examiner Miller: either the incorporation of a frozen drum into the freezing process, or the incorporation of polyvinyl pyrrolidone into the composition being frozen.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (571) 272-1318. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Dr. Yogendra Gupta, may be reached at (571) 272-1316.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John R. Hardee
Primary Examiner
January 17, 2005